

WHAT IS CLAIMED IS:

1 1. A three-axis attitude control propulsion device comprising a
2 pressure generating means and two three-way discharge changeover
3 means connected to one end of said pressure generating means, said two
4 three-way discharge changeover means positioning with 180 degrees
5 between each other in a rotation symmetry around a reference of an axis of
6 said pressure generating means.

1 2. A three-axis attitude control propulsion device as claimed in
2 Claim 1, wherein one of said two three-way discharge changeover means
3 has three discharge ports, of which orientations of openings are (a) an
4 orientation in a first specific angle, (b) an orientation deviated with 90
5 degrees counterclockwise from said first specific angle and (c) an
6 orientation deviated with 90 degrees clockwise from said first specific angle,
7 the other of said two three-way discharge changeover means has three
8 discharge ports, of which orientations of openings are (d) an orientation in
9 a second specific angle that is deviated with 180 degrees from said first
10 specific angle, (e) an orientation deviated with 90 degrees clockwise from
11 said second specific angle and (f) an orientation deviated with 90 degrees
12 counterclockwise from said second specific angle and said orientation of (b)
13 above and said orientation of (e) above are parallel to each other.

1 3. A three-axis attitude control propulsion device as claimed in
2 Claim 2, wherein said orientation of (a) above and said orientation of (d)
3 above are orthogonal to the axis of said pressure generating means and all
4 of said orientations of (a) to (f) above are in one plane orthogonal to the axis

5 of said pressure generating means.

1 4. A three-axis attitude control propulsion device as claimed in
2 Claim 2, wherein both of said two three-way discharge changeover means
3 are three-way discharge changeover valves of a valve plug rotation type in
4 which a valve plug is rotated.

1 5. A three-axis attitude control propulsion device as claimed in
2 Claim 4, wherein said valve plug is constructed of a carbon material.

1 6. A three-axis attitude control propulsion device as claimed in
2 Claim 5, wherein said carbon material is graphite.

1 7. A flying object comprising a three-axis attitude control
2 propulsion device as claimed in any one of Claims 1 to 6.